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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,010	07/19/2001	Mark L. Adams	TI-32539	8727
23494	7590 06/27/2005		EXAMINER	
TEXAS INSTRUMENTS INCORPORATED			NGUYEN, QUYNH H	
P O BOX 655474, M/S 3999 DALLAS, TX 75265			ART UNIT	PAPER NUMBER
•			2642	
		DATE MAILED: 06/27/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/909,010	ADAMS, MARK L.			
Office Action Summary	Examiner	Art Unit			
	Quynh H. Nguyen	2642			
The MAILING DATE of this communication ap Period for Reply	opears on the cover sheet with the	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPITHE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a refull find period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statution Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tile ply within the statutory minimum of thirty (30) day d will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	mely filed  ys will be considered timely.  the mailing date of this communication.  ED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 05.	April 2005.				
	is action is non-final.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) ⊠ Claim(s) <u>1-10</u> is/are pending in the application 4a) Of the above claim(s) is/are withdrays   5) ⊠ Claim(s) <u>1-5</u> is/are allowed. 6) ⊠ Claim(s) <u>6-10</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/	awn from consideration.				
Application Papers	·				
9)☐ The specification is objected to by the Examin	ner.				
10) ☐ The drawing(s) filed on is/are: a) ☐ ac	The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.				
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	,	,			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	nts have been received.  Its have been received in Applicat  Ority documents have been receive  Au (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachment(s)		·			
1) Notice of References Cited (PTO-892)	4) Interview Summary				
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date</li> </ol>	Paper No(s)/Mail D  5) Notice of Informal F  6) Other:	ate Patent Application (PTO-152)			

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#### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### Response to Amendment

2. Applicant's amendment filed on 4/5/05 has been entered. 1, 4, 6, and 7 have been amended. No claims have been cancelled. No claims have been added. Claims 1-10 are still pending in this application, with claims 1, 4, 6, and 7 being independent.

#### Claim Rejections - 35 USC § 103

3. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komano et al. (U.S. Patent 5,841,054) in view of Arnold et al. (U.S. Patent 5,908,997).

Regarding claim 6, Komano teaches the steps of: a digital signal processor (Fig. 2A, DSP 201 and 202), a digital to analog converter DAC 20; DSP 211 to drive the DAC (col. 4, lines 3-9); a general purpose processor CPU 101; the GPP (CPU 101) configured to received MIDI signals (col. 3, lines 50-58); the DSP response to the MIDI synthesizer and render the audio signals to the DAC via DSP to implement a MIDI synthesizer (col. 3, line 59 through col. 4, line 9).

Komano does not teach MIDI files stored in the flash memory.

Arnold et al. teach the flash memory via the GPP to open a MIDI bit stream (col. 10, line 54 through col. 11, line 17);

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the features mentioned above, as taught by Arnold, in Komano's system in order to have a wireless handsets that would utilize flash memory to optimize the use of DSP memory by only loading required sample sets from flash, optimize space and minimize costs. These are common motivations in any system and that Arnold does not change the operation of Komano.

Claims 7 and 9 are rejected for the same reasons as discussed above with respect to claim 6. Furthermore, Komano teaches data storing means ROM 102 and Arnold et al. teach data storing means RAM memory 160; Komano further teaches first data processing means general purpose processor CPU 101 for synthesizing audio signals; data converting means a digital to analog converter DAC 203; and a second data processing means for reading and parsing the MIDI files a digital signal processor (col. 3, lines 26-35).

Regarding claim 8, Arnold et al. teach the data storing means comprises a flash memory (col. 10, lines 56-57).

Regarding claim 10, Arnold et al. teach the first data processing means is word addressable (col. 12, line 51 – CPU 128 MB) and the second data processing means is byte addressable (col. 12, lines 55-57).

## Allowable Subject Matter

4. Claims 1-5 are allowed.

#### Response to Arguments

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5. Applicant's arguments with respect to claims 6-10 have been considered but are

moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Quynh H. Nguyen whose telephone number is 571-272-

7489. The examiner can normally be reached on Monday - Thursday from 6:15 A.M. to

4:45 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ahmad Matar, can be reached on 571-272-7488. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

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you have questions on access to the Private PAIR system, contact the Electronic

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Lunh H. Nguyen
Quynh H. Nguyen
Patent Examiner

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